

SCREENING FORM FOR LOW-EFFECT HCP DETERMINATIONS and Environmental Action Statement

I. Project Information

- A. **Project name:** Los Esteros Critical Energy Facility Low-effect Habitat Conservation Plan for the Bay Checkerspot Butterfly and Serpentine Endemic Plant Species, Santa Clara County, California.
- B. **Affected species:** Threatened Bay checkerspot butterfly (*Euphydryas editha bayensis*), endangered coyote ceanothus (*Ceanothus ferrisiae*), Metcalf Canyon jewel-flower (*Streptanthus albidus albidus*), Santa Clara Valley dudleya (*Dudleya setchellii*), and Tiburon paintbrush (*Castilleja affinis neglecta*) (collectively referred to as the Covered Species).
- C. **Project size:** 10,340 acres (serpentine grassland and Los Esteros Critical Energy Facility)
- D. **Brief project description:** The proposed project is the implementation of the Los Esteros Critical Energy Facility (LECEF) Habitat Conservation Plan (HCP). Activities included in the HCP are the completion and operation of LECEF Phase 2 and implementation of management and monitoring activities on a 40 acre serpentine preserve (Covered Activities). The LECEF Phase 2 site is located at 800 Thomas Foon Chew Way approximately one mile west of the intersection of Interstate 880 and State Route 237 in the City of San Jose, California. Completion of Phase 1 included construction of a 180 megawatt natural gas fired, simple cycle peaking facility. Phase 2 is the conversion of the facility into a combined-cycle operation increasing the generating capacity to 320 megawatts. The LECEF Phase 2 is within a 34 acre parcel, 21 acres previously developed (under Phase 1) and 17 acres that will be used during construction of Phase 2. There are no known threatened or endangered species or their habitats located within the 34 acre parcel. Emissions from power plants, vehicles, and industrial development result in deposition of nitrogen compounds (such as nitrogen oxides, nitric acid, and ammonia) onto nutrient poor serpentine soils. Nitrogen is the primary limiting factor affecting plant growth (Weiss 1999) and depositional nitrogen enriches serpentine soils and allows for the invasion of non-native and invasive vegetation. Degradation of serpentine grasslands has been observed in the Bay Area (Weiss 1999). Completion of Phase 2 of the LECEF is expected to result in indirect effects to the Bay checkerspot butterfly and serpentine endemic plant species in Santa Clara County, California. The LECEF will permanently protect (conservation easement) and manage a 40 acre mitigation site on Coyote Ridge for the Covered Species. The management plan will include a vegetation management strategy utilizing cattle or manual removal (hand removal, mowing, and use of trimmers) of non-native and/or invasive vegetation. The management plan will include an adaptive management component to allow for changes in grazing animals, density of grazers, timing of treatments, and changes in mechanical

removal of non-native vegetation. The project is not expected to result in the permanent loss of serpentine grassland, but is expected to result in indirect effects to approximately 10,306 acres of serpentine grasslands in Santa Clara County.

- E. **Minimization and Mitigation Plans:** The Calpine Corporation (Applicant) will mitigate for the indirect effects to the Covered Species by permanently protecting (conservation easement), enhancing, and managing 40 acres of serpentine grassland on Coyote Ridge in Santa Clara County, CA.

II. Does the HCP fit the low-effect criteria in the HCP Handbook?

- A. **Are the effects of the HCP minor or negligible on Federally listed, proposed, or candidate species and their habitats covered under the HCP prior to implementation of the mitigation plan?**

Yes. The proposed HCP would result in direct effects to five federally listed species as a result of monitoring and maintenance of the 40 acre serpentine preserve. While these actions will likely have short term adverse affects to these five listed species (death or injury as a result of grazing, prescribed fire, and monitoring), long term affects are expected to be beneficial and result in improved habitat quality and larger populations of all five species within the preserve area. Implementation of the proposed HCP will also result in indirect adverse affects resulting from degradation of the five listed species' habitat from atmospheric nitrogen deposition within 10,306 acres. All 10,306 acres are located within an area with an average annual deposition rate of approximately 8.4 kg/N/ha/yr, with some areas (Tulare Hill) receiving more than 15 kg/N/ha/yr (CH2MHill 2010, p. 4-3). The LECEF is expected to increase the amount of annual nitrogen deposition by less than 0.1 percent, which the Service expects to result in minor effects to the five listed species.

Critical habitat totaling 18,293 acres has been designated for the Bay checkerspot butterfly in 13 units in San Mateo and Santa Clara Counties (Service 2008). No critical habitat has been designated for coyote ceanothus, Metcalf Canyon jewel-flower, Santa Clara Valley dudleya, or the Tiburon paintbrush. Completion of the LECEF Phase 2 would indirectly affect the Covered Species within serpentine grassland in nine of these units, all in Santa Clara County; these nine units comprise 16,601 acres (90.75 percent of all critical habitat designated for the Bay checkerspot butterfly). The 16,601 acres encompass grasslands that include both serpentine and serpentine like soils. The fraction of a percent increase in nitrogen deposition above existing deposition rates is not expected to prevent critical habitat from sustaining its role in the conservation and recovery of the species and the protection, management, and enhancement of the preserve is expected to improve the quality of 40 acres of critical habitat in Unit 13.

- B. **Are the effects of the HCP minor or negligible on other environmental values or resources (e.g. air quality, geology and soils, water quality and quantity, socio-**

economic, cultural resources, recreation, visual resources, etc.) prior to implementation of the mitigation plan?

Yes. Implementation of the proposed project would not create new stationary sources of air emissions; however, the proposed Covered Activities do include conversion of an existing gas power plant from a single cycle plant to a combined cycle plant. Operational emissions associated with the proposed project are expected to result from on-going operation of the LECEF and vegetation management and maintenance of the 40 acre serpentine preserve. Direct, intermittent operational emissions could result from exhaust emissions from mowing, dust from mowing or other vegetation management activities, or emissions associated with maintenance of infrastructure. The fractional percent increase in nitrogen deposition is expected to result from direct and indirect impacts due to operations and maintenance activities are expected to have a negligible effect on ambient air quality.

As with cultural and paleontological resources (see III-B below), implementation of LECEF Phase 2 and management of the 40 acre serpentine preserve area is not expected to impact geological or mineralogical resources. The Phase 2 site has been previously disturbed by agriculture and commercial practices and management actions on the 40 acre serpentine preserve are not expected to result in significant soil disturbance.

The impacts of operational noise associated with LECEF Phase 2 were analyzed and are not expected to exceed the average nighttime background noise at the nearest residence by more than 5 decibels (dBA) (for a total nighttime average of 55 dBA). The ambient noise level in Coyote Creek is not expected to exceed 60 dBA. The range of normal conversation at 3-5 feet is approximately 60 dBA. The Occupational Safety and Health Administration (OSHA) begin limiting noise exposure at 85-90 dBA. Implementation of LECEF Phase 2 is not expected to result in more than minor or negligible impacts on noise. Management of the 40 acre serpentine preserve is not expected to result in an increase over existing noise levels because the primary management technique is grazing (density of one cow per 10 acres) with the preserve site only having an average of four cows on the property and the nearest residence is approximately 0.62 miles west on the opposite side of State Highway 101, an eight lane highway.

Construction of the LECEF Phase 2 will result in soil disturbance from grading, trenching, and excavation. Ground disturbing activities can potentially result in both wind and water erosion. As a result project proponents typically develop erosion and sediment control plans and/or best management practices (BMPs) to avoid and minimize erosion. LECEF Phase 1 developed a set of BMPs to minimize soil erosion and Phase 2 will implement many of the same BMPs. LECEF Phase 2 has also included several more BMPs as well as development of a storm water pollution prevention plan (SWPP Plan) for construction. Prescribed burning has the potential to result in soil erosion, but conducting prescribed burns during late spring is expected to minimize and likely avoid excessive soil erosion completely because the heaviest period of rainfall will have already occurred. Implementation of BMPs and a SWPP Plan and timing of grazing will

minimize the risk of soil erosion from LECEF Phase 2 and management of the 40 acre serpentine preserve; as such implementation of the proposed HCP is expected to have only minor or negligible effects on soils.

Immediately east of the LECEF Phase 2 site is an agricultural field. Coyote Creek runs along the east side of the agricultural field and east of that is the City of Milpitas. North of LECEF Phase 2 is the Silicon Valley Power 230 kV switching station and the Pacific Gas and Electric Los Esteros Substation. Northwest of the site is the San Jose/Santa Clara Water Pollution Control Plant (WPCP). Surrounding the WPCP are sludge drying ponds and undeveloped buffer lands. South of the LECEF Phase 2 site is Ranch Drive and State Route 237. Modification of the existing LECEF from a simple-cycle peaking facility to a combined-cycle operation is not expected to degrade existing visual and aesthetic resources. The 40 acre serpentine preserve is one parcel within a several thousand acre ridge line known as Coyote Ridge. Grazing is the current management practice for the majority of Coyote Ridge and the continuation of grazing on the 40 acre serpentine preserve is not expected to degrade existing visual and aesthetic resources.

C. Would the impacts of this HCP, considered together with the impacts of other past, present and reasonably foreseeable similarly situated projects not result, over time, in cumulative effects to environmental values or resources which would be considered significant?

Yes. The proposed project would result in minor indirect effects to Bay checkerspot butterflies, Bay checkerspot butterfly critical habitat, coyote ceanothus, Metcalf Canyon jewel-flower, Santa Clara Valley dudleya, and Tiburon paintbrush and their habitats. Present and future projects adjacent to the project area must include, when appropriate, mitigation measures for these species. In addition, the Santa Clara Valley Habitat Conservation Plan/Natural Communities Conservation Plan (SCVHCP/NCCP) is currently being prepared and is expected to cover the majority of projects that will be implemented in the area for the next 50 years (IFCJSA 2009). Avoidance, minimization, and mitigation measures for the SCVHCP/NCCP will be implemented for effects resulting from the activities covered under that plan. Therefore, no additional development is expected to occur without assurances that effects to these listed species are appropriately addressed.

III. Do any of the exceptions to categorical exclusions apply to this HCP? (from 516 DM 2.3, Appendix 2)

Would implementation of the HCP:

A. Have significant adverse effects on public health or safety?

No. After completion of LECEF Phase 2, at the point of maximum exposure, the maximum cancer risk (worse case) is estimated to be 0.093 in one million. An air toxics risk assessment was conducted for LECEF Phase 2 and results of the modeling indicate

that there will be no significant incremental risk to public health from operation of the LECEF Phase 2. Additionally, non-cancer chronic and acute effects are not expected to result in significant adverse effects. Therefore, no long term adverse effects on public health and safety are anticipated as a result of implementation of LECEF Phase 2. Operation and maintenance of the 40 acres serpentine preserve are not expected to have any adverse impacts on public health and safety.

B. Have adverse effects on such unique geographic characteristics as historic or cultural resources, park, recreation or refuge lands, wilderness areas, wild or scenic rivers, sole or principal drinking water aquifers, prime farmlands, wetlands, floodplains, or ecologically significant or critical areas, including those listed on the Department's National Register of Natural Landmarks?

No. Prior to the 1980s the 34 acre LECEF site was used for agricultural purposes including row crops and orchards. Post 1980, the area was used for commercial uses, primarily green houses. Previous inventories of the LECEF site identified potential cultural and historic materials (ceramic fragments) within plowed fields. The area also contained an abundance of recent trash (glass, plastic, etc.). In addition, some paleontological resources were identified during construction of Phase 1, gastropods and plant fossils, but no vertebrate fossils. However, since the LECEF Phase 2 is within the footprint of Phase 1 and due to the past land use of the site, the Service considers the potential impacts on cultural, historic, and paleontological resources within the 34 acre site are expected to be minor and/or negligible. Management actions (i.e., grazing, prescribed burns, and mowing) within the 40 acres serpentine preserve are not expected to impact cultural, historical, or paleontological resources because these actions do not typically result in more than minor ground or soil disturbance.

No geographic characteristics such as refuge lands, wilderness areas, wild or scenic rivers, principal drinking water aquifers, floodplains, wetlands, or ecologically significant areas occur within or adjacent to the LECEF Phase 2 project area. Since the location of Phase 2 is completely within the project boundaries of Phase 1 no prime farmland, farmland of statewide or local importance, or unique farmland occur within the LECEF Phase 2 project area; therefore none will be affected. Additionally the area is designated as light industrial. The 40 acre serpentine preserve is currently utilized for cattle grazing. Since the primary management tool for maintaining habitat for the five listed species is grazing no adverse effects to prime farmland, farmland of statewide or local importance, or unique farmland are anticipated.

C. Have highly controversial environmental effects?

No. No substantial disputes exist as to the size, nature, or environmental consequences of the proposed action; the project does not have highly controversial effects.

D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?

No. The proposed project would not involve significant environmental effects or involve unique or unknown environmental risks because the proposed construction activities are generally routine with predictable impacts. There are no uncertain or potentially significant impacts expected from the proposed project or the proposed HCP.

E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?

No. The proposed project is within a 34 acre area that is zoned as light industrial, has previously been used for commercial and agricultural uses, and is currently the site of LECEF Phase 1. This HCP implements minimization and mitigation measures similar to measures implemented for the Metcalf Energy Facility approximately 17.50 miles south of the LECEF and similar to the draft HCP prepared for the Pico/Don Raesfeld Power plant located approximately 2.5 miles southwest of the LECEF. This HCP is not proposing minimization and mitigation inconsistent with the draft Santa Clara Valley Habitat Conservation Plan/Natural Community Conservation Plan. No significant environmental impacts are anticipated from this project. Therefore, the issuance of this permit would not establish a precedent for future actions.

F. Be directly related to other actions with individually insignificant but cumulatively significant environmental effects?

No. Other industrial development has occurred in the vicinity of the LECEF Phase 2 project site, including the WPCP site and the PG&E switching station, but the proposed project is not directly related to these other actions. The LECEF Phase 2 is related to LECEF Phase 1, but the California Energy Commission determined in its Commission Adoption Order for the project that Phase 2 would not result in any cumulative adverse impacts to the environment (CEC 2006). The 40 acre serpentine preserve is located on Coyote Ridge and is adjacent to areas that have been permanently protected for the benefit of the Bay checkerspot butterfly and serpentine endemic plants. However, protection, management, and monitoring associated with the 40 acre preserve is not directly related to these other actions.

G. Have adverse effects on properties listed or eligible for listing on the National Register of Historic Places?

No. The proposed LECEF Phase 2 is located within the project area for the LECEF Phase 1 and there are no state or federal historic properties within or adjacent to the proposed project. The Service is not aware of any property, listed or eligible for listing, on the National Register of Historic Places in the Plan area.

H. Have adverse effects on listed or proposed species, or have adverse effects on designated Critical Habitat for these species?

No. Although the proposed action may result in the incidental take of Bay checkerspot butterflies, coyote ceanothus, Metcalf Canyon jewel-flower, Santa Clara Valley dudleya, and Tiburon paintbrush, any such take would result in minor or negligible effects to the persistence of the species as explained in Section II.A above. Critical habitat for the Bay checkerspot butterfly occurs within the project area, but as described in Section II.A above it is not expected to appreciably diminish the value of the critical habitat and the protection and management of the 40 acres serpentine preserve is expected to improve the quality of critical habitat.

I. Have adverse effects on wetlands, floodplains or be considered a water development project thus requiring compliance with either Executive Order 11988 (Floodplain Management), Executive Order 11990 (Protection of Wetlands), or the Fish and Wildlife Coordination Act?

No. There are no floodplains, wetlands, or other aquatic bodies within the proposed project area. There are no wetlands on federal lands within the proposed project area; therefore, Executive Order 11990 does not apply. The proposed project is not a water development project; therefore the Fish and Wildlife Coordination Act does not apply.

J. Threaten to violate a Federal, State, local or tribal law or requirement imposed for the protection of the environment?

No. Implementation of the HCP would not violate Federal, State, local or tribal law imposed for the protection of the environment.

IV. ENVIRONMENTAL ACTION STATEMENT

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA), and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record. Based on the analysis above, this HCP qualifies as a "Low-effect" HCP as defined in the U.S. Fish and Wildlife Service Habitat Conservation Planning Handbook (November 1996). The extraordinary circumstances defined in 516 DM 2 Appendix 2 were fully considered, and the proposed action does not fall within any exception to the Categorical Exclusions. This action fits categorical exclusion C(2) of 516 DM 8.5, and can be categorically excluded from NEPA as provided by 40 CFR 1508.4, 516 DM 2, and 516 DM 8. Therefore, a more extensive NEPA process is unwarranted, and no further NEPA documentation will be made.

Other supporting documents:

(CEC) California Energy Commission. 2006. Application for certification (03-AFC-2) for the Los Esteros Critical Energy Facility II Phase 2. Final Commission Decision. CEC-800-2005-004-CMF. October 2006.

CH2MHill. 2010. 2009 Annual monitoring report for the Metcalf Energy Center Ecological Preserve and Los Esteros Critical Energy Facility. Received February 2010.

ICFJSA. 2009. Santa Clara Valley habitat plan: 2nd administrative draft. Unpublished report submitted to the Santa Clara County Planning Office. August 1, 2008. 750+ pp.

(Service) U.S. Fish and Wildlife Service. 2008. Endangered and threatened wildlife and plants; final determination of critical habitat the Bay checkerspot butterfly (*Euphydryas editha bayensis*). **Federal Register** 73: 50405-50452.

Weiss, S.B. 1999. Cars, cows, and checkerspots butterflies: nitrogen deposition and management of nutrient-poor grasslands for a threatened species. *Conservation Biology* 13(6): 1476-1486.

Signature Approval:

Susan K. Moore
Field Supervisor
Sacramento Fish and Wildlife Office

Date